RF100ANQ

The RF100ANQ Analyser Filter System is a revolutionary new product specifically designed to provide filtered samples for analysers and dosing pump systems with almost no maintenance.

It is excellent for filtering difficult samples contaminated with suspended solid for supply to chlorine, ammonia and other analysers.

The small 120 watt pump delivers the sample to your analyser and drives a self-cleaning filter that prevents the filter mesh, pump and analyser from blocking and blinding.

This wall mounted unit has a continuous flow through the tank – ideal for fast loop systems. The self-cleaning filter in the tank withdraws a sample and delivers between 0 and 16 litres per minute to your analyser.

Key Features

✓ Removes suspended solids down to 60 microns
✓ Mag drive pump with polypropylene casing and impeller
✓ Board mounted for ease of installation
✓ Float switch for dry run protection
✓ High reliability and easy to use
✓ Power - 240v or 110v 50 Hz, or 115v 60 Hz
✓ 16 litres per minute maximum flow
✓ ABS & polypropylene self cleaning filter head
✓ Nylon monofilament filter mesh
✓ PVC filter tank and backing board
**Description**

The RF100ANQ is a self-cleaning analyser filter system, for filtering fluids to 60 microns and supplying it to analytical equipment. The system samples from a continuous flow through a tank maintaining a constant water level, and can sample from very dirty water.

Debris and other suspended solids in the sample are carried out by the flow through the system or, if they are particularly heavy, can be periodically purged through a valve at the conical base of the tank. This can be automated on a timer if required.

This is a very robust system continuously filtering fluids to 60 microns. The pump drives the filter and supplies from 0 – 16 litres/minute to your analyser.

<table>
<thead>
<tr>
<th>Model</th>
<th>Volts</th>
<th>kW</th>
<th>L/min Max</th>
<th>Max Head</th>
<th>Float Switch</th>
<th>Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>RF100ANQ 240v</td>
<td>240</td>
<td>0.07</td>
<td>16</td>
<td>N/A</td>
<td>Yes</td>
<td>Single</td>
</tr>
<tr>
<td>RF100ANQ 110v</td>
<td>110</td>
<td>0.07</td>
<td>16</td>
<td>N/A</td>
<td>Yes</td>
<td>Single</td>
</tr>
<tr>
<td>RF100ANQ 115v 60Hz</td>
<td>115</td>
<td>0.09</td>
<td>16</td>
<td>N/A</td>
<td>Yes</td>
<td>Single</td>
</tr>
</tbody>
</table>

**Filter System Construction**

- **Pump**: Magnetic drive, polypropylene pump head
- **Filter head**: Polypropylene, ABS, with nylon mesh
- **Back ing board**: PVC
- **Filter chamber**: PVC
- **Standard filter mesh screen**: 60, 115 or 250 micron nylon
- **Tank**: Polyethylene
- **Pipework**: PVC / ABS
- **IP66 Control Box**: ABS

**Pump Characteristics**

- **Pump housing**: Polypropylene
- **Impeller**: Polypropylene
- **Spindle**: Ceramic
- **Thrust Washer**: Ceramic
- **O-Ring**: Nitrile
- **Impeller Magnet**: Stront Ferrite

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</tbody>
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- **Model**: 230v 50Hz
- **Volts**: 240
- **kW**: 0.07
- **L/min Max**: 16
- **Max Head**: N/A
- **Float Switch**: Yes
- **Phase**: Single

- **Model**: 230v 60Hz
- **Volts**: 240
- **kW**: 0.09
- **L/min Max**: 16
- **Max Head**: N/A
- **Float Switch**: Yes
- **Phase**: Single

- **Model**: 110v
- **Volts**: 110
- **kW**: 0.07
- **L/min Max**: 16
- **Max Head**: N/A
- **Float Switch**: Yes
- **Phase**: Single

- **Model**: 115v
- **Volts**: 115
- **kW**: 0.09
- **L/min Max**: 16
- **Max Head**: N/A
- **Float Switch**: Yes
- **Phase**: Single

- **Model**: 60Hz
- **Volts**: 110
- **kW**: 0.07
- **L/min Max**: 16
- **Max Head**: N/A
- **Float Switch**: Yes
- **Phase**: Single

- **Model**: 60Hz
- **Volts**: 115
- **kW**: 0.09
- **L/min Max**: 16
- **Max Head**: N/A
- **Float Switch**: Yes
- **Phase**: Single

**Pump Motor**

- **Frame**: 56
- **Mounting**: B34
- **IP**: 44
- **Phase**: Single
- **kW**: 0.07
- **Amps**: 0.7
- **kg**: 3.25

- **Frame**: 56
- **Mounting**: B34
- **IP**: 44
- **Phase**: Single
- **kW**: 0.09
- **Amps**: 1.4
- **kg**: 3.25

- **Frame**: 56
- **Mounting**: B34
- **IP**: 44
- **Phase**: Single
- **kW**: 0.09
- **Amps**: 0.7
- **kg**: 3.25
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How it works....

The fluid to be filtered is introduced through the 1” inlet at the bottom of the filtering chamber.

Most of the liquid exits through the outlet and is sent back to the source. The filter head has an internal backwashing rotor that continually cleans the filter screen.

The fluid flows from the outside of the filter head through a 60- micron nylon mesh.

The pump sucks fluid from the inside of the filter head and a proportion is returned to the internal cleaning rotor. The remaining filtered fluid is sent to the analyser.

This is adjustable from 0 – 16 litres / minute. The self-cleaning filter in the tank withdraws a sample and delivers between 0 and 16 litres per minute to your analyser.
Flow to analyser. Adjust between 0 and 15 l/min with valve as required.

OUTLET - Continuous flow of water out to drain. Flow rate through tank 15 litres/min minimum.

TO CHANGE FILTER CAGE:
   a) Release Clip
   b) Remove Filter Body unit (with Cage)
   c) Unscrew Retaining Nut
   d) Remove Filter Cage and replace with new (available from Rotorflush Filters Ltd)
   e) Refit Retaining Nut (hand tight)
   f) Replace Filter Head and re-clip.

Water INLET (to be filtered)
Flow rate = 15 L/min minimum + flow to analyser

Outlet to periodically drain solids that may settle in the tank. (Auto purge optional)

1. Main power ON/OFF
2. Fault warning Light
3. Reset Button
4. Pressure sensor unit
5. Continuous bleed (self prime feature)
6. Filter tank
7. Anti-splash lid
8. 1 1/2" BSP (NPT) Outlet
9. Filter Cage
10. Retaining Nut
11. Filter Head Body
12. 1" BSP (NPT) INPUT
13. 1" BSP (NPT) Purge
14. MAG drive pump (To supply drive to backwash rotor and provide filtered supply to analyser)
15. 3/8" BSP (NPT) Ball valve (controls flow to analyser)
16. Float switch
17. Quick Release Clip

*NPT on US spec units*